PointSet

A new generation of high performance public blockchain
Multi−layered incentive distributed trust network

PointSet White Paper

PointSet White Paper (Brief Edition)

PointSet: The First Distributed Network of Multi-layer Mining system

Explanation:

This documentation is V1.2.2 of PointSet technical white paper, developed by PointSet R&D team. It introduces the background, technical features and application scenario. The contents of the white paper might be updated with the project schedule. Please check PointSet.org for the latest introduction.

With the continuous development of blockchain, R&D team will improve the technical plans and constantly update the technical white paper under the supervision of foundation. Circulation and distribution regulation of basic token remained unchanged.
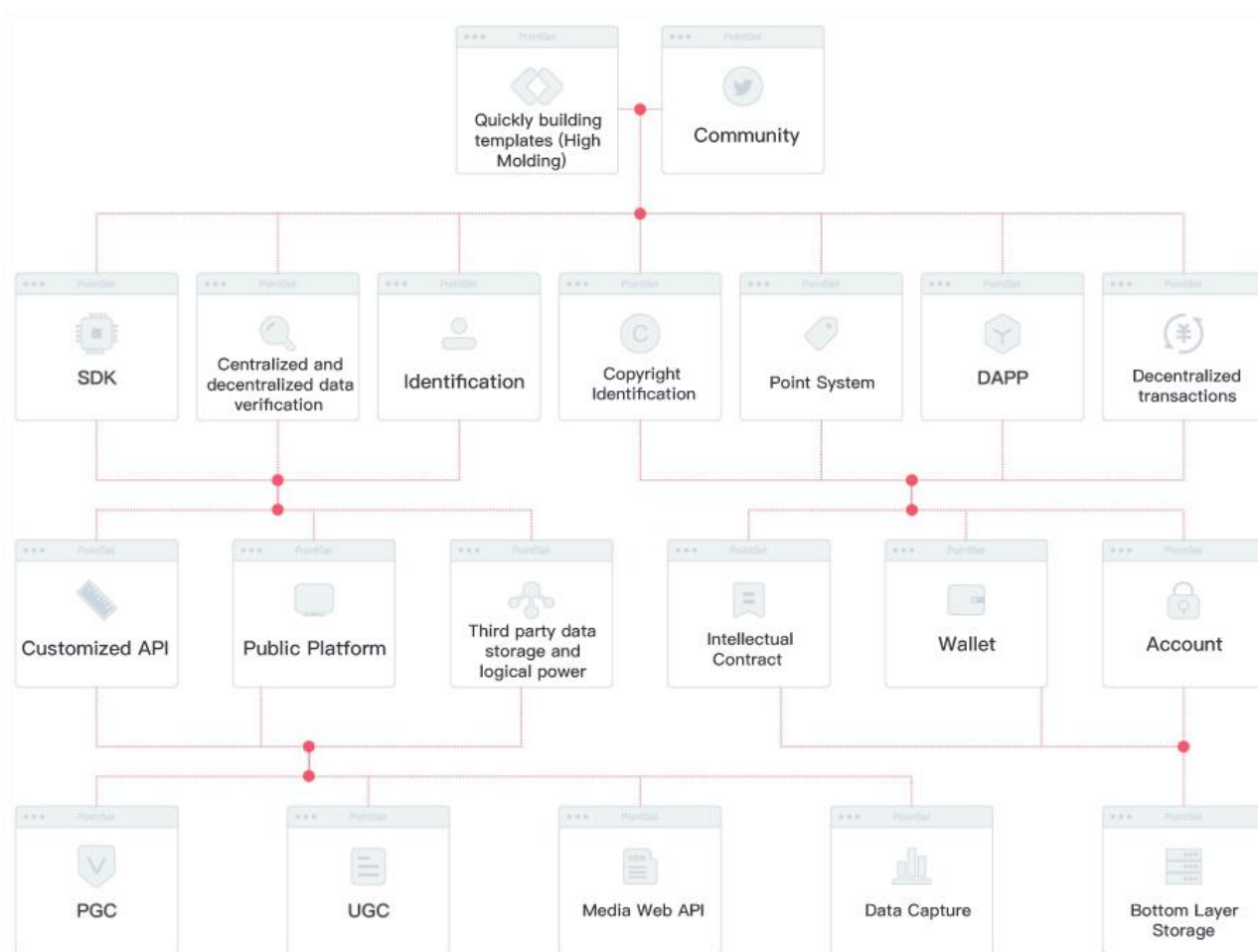
I. Background：

The booming of the Internet brings a bunch of giant companies: Amazon, Facebook, Google, Alibaba, Tencent and etc. The traditional Internet industry has become increasingly centralized. The primitive driving force of capital leads centralized enterprises to occupy the market in different industries with the purpose of indefinite expansion. From the area of PC to mobile Internet, information flow explodes. Various industries have been occupied by the centralized force, which grants later participants little breakthrough opportunities. Up till today, the traditional Internet industry has far off the track of freedom, liberty, collaboration and sharing.

Since the release of Bitcoin White Paper, more and more people have gradually accepted this concept. Bitcoin is defined as an electrical cash system which realized by P2P technology. Blockchain, the technology used in the Bitcoin system can be better applied in reality as a decentralized database, which greatly reduces the cost of building trust. Compared with centralized operation mode applied by traditional Internet industry, blockchain technology separates from the Bitcoin system and quickly merges with different industries in the world. Decentralized multi-people accounting system and distributed application make everything much more reliable. Compared with information transformation in the traditional Internet industry, blockchain enjoys the advantage of transferring value, improving efficiency, reducing trust budget and participating in fair competitions.

Digital currency is the most convenient and impartial investment approach. Compared with traditional investment, digital currency enjoys the advantage of the instant transaction, international trade, low service charge and etc. These merits greatly improve its liquidity. In addition, fast change in the market, remarkably fluctuation, shortcut opening bank account, convenient cash flows, 7x24 transactions also turn digital currency a natural type of investment. 2017 has witnessed the boom of digital currency. this year, quotations had several large fluctuations; price of

Bitcoin reached a historical peak of US. $20 thousand and people began to accept the concept of digital currency and digital assets. From hacker virus incident at the beginning of the year, Bitcoin hard fork, popular ICO to the digital currency carnival by the end of the year, the enthusiasm of digital currency never fades. The index also indicts the strong self-marketing power of digital currency, which includes rapid growth of computing power, explosive growth of TOKEN numbers and the decrease of Bitcoin proportions. We believe digital currency takes an important place in the future world.

II. PointSet Technology Introduction

PointSet Network System Architecture

As an underlying network, PointSet is based on distributed technology, building a decentralized network system. It plays an important role in obtaining information from the underlying layers and high-performance storage, processing intermediate data and recording on the chain, providing api and sdk to the application layer and providing the underlying data and connecting the upper application. SET in the token economic model serves as the medium of the ecological system while multi-layer mining system guarantees the virtuous circle of the entire loop.

1. PointSet Chain

PointSet applies the latest development technology, providing data records for general users, developers, websites, third parties, platforms and organizations on the chain (including ID identification, copyright reservation, incentive mechanisms and etc.).

Every data on the PointSet is an individual Point and countless Points consist of a Set. Smart contracts are included on the Chain where developers could quickly build their own DAPP. This could also be accomplished through the upper PointDock.

Besides the existing parent blockchain technology, PointSet also innovates and improves PointCheck, PointDock, and PointPaxos to protect the safety of ecological data.

2. PointCheck

PointSet can calibrate copyright and record contents. Data originates from PGC, UGC, media and other channels. Based on SimHash and Sim Hash, PointCheck is adjusted. By verifying similarities of submitted copyright contents, conclusions are drawn after calculating weights (whether legally stored and verify corresponding rewards). Through the following procedure, SimHash calculates similarities of two documents"

1) Word Segmentation

Segment words in documentation and assign weight to each word (for example, tf-idf could be used to calculate weight, but the algorithm should be changed. Tf-dif value is mapping to an integral value via the monotone increasing function.)

2) CalculateHash

3) Weighted

Multiple word with its corresponding weight; replace 0 with -1; multiply the corresponding weight

4) Combine: adding the word   sequences from beginning to the end

5) Dimension Reduction

Turn the combination results into 0-1string, greater than 0>1, less than 0>0.

Then each document would generate one ID.

6) Compare Hamming Distance

Calculate results obtained after the dimension reduction and ID of documentations; figure out the number of 1 in the result; get hamming distance.

SimHash is efficient and suitable for a distributed pattern. It consumes little space but might have misjudgment because of the co-existence of long and short documentations.

Preliminary processing of MinHash is extremely similar to that of SimHash, but the verification efficiency on binary data is better than SimHash.

PointCheck prioritizes based on two hash similarities and uses MinHash after binary verification. Others apply SimHash, which improves the efficiency and accuracy.

3. Point Dock

PointDock is a complete set of access systems. PointSet could not only connect project party, media platform, but also We Media and general users.

Point Dock has the following systems: 1) **Points system**. General users could log into PointSet. After registering and passing the identification check, users or the platform could store documentation on PointSet at any time. Results would be derived after PointCheck verification and corresponding points would be returning to your account. 2) **Connected to We Media**. PointSet will feed through public Wechat account and Topbuzz account. After binding identity, copyright protection, point bonus and other operations will be available. 3) **Low budget WEB building.** In order to facilitate the third party connection and focus on operational services, we have summarized a website template which includes complete PointSet incentive system, ID identification, and copyright protection. General users, therefore, could cut down their registrations, access date and realize from Point to Set after using the PointSet identification. 4) **General developers**. General developers could access a much-detailed API with a higher rank. The developer could get PointSet users just using their identification system without extra costs. They can also selectively choose to access point system, copyright system and etc. 5) **Co-developer**. PointSet will grant more access to co-developers to jointly exploring the blockchain world and creating huge social values.

4. Point PAXOS Consensus Algorithm

Three important modules in blockchain are safety, efficiency and TPS. These three components are contradictory and we can only choose two out of three. There is no perfect solution in realizing all three of them. For the existing blockchain projects, we have to unnecessarily weaken one and maximize the other two.

Cores of cryptographic currency are computers and mathematical trust mechanism. It is a system separated from the third party (medium, agent, hosted platform), which breaks the prisoner's dilemma mechanism. We reach a consensus after adjusting PAXOS algorithm. For example, one of the potential risks is double spend. It can be solved via node verification and witnesses. Witnesses here refer to 10 nodes selected in witness nodes, using Paxos algorithm to ensuring the efficient operation of the system.

Paxos proves to be the first consensus algorithm, whose principle based on the submission and expansion of two phases. As the predecessor of consensus

algorithm, it is known for its complexity of academic papers (the algorithm itself proves to be just fine). In this algorithm, nodes are divided into three categories:

- Proposer: Come up with a proposal and waiting for approval. The client end acts this role.

- Acceptor: Responsible for the voting part. The service end serves this part.

- Learner: Being informed of the voting results and unified with the results. They are not involved in the voting procedure. Could be client end or service end. Algorithm should satisfy the need of safety and liveness.

- Safety: ensure the righteous of the results. No ambiguity or mistakes will happen. Value could only be approved in the proposal put forward by proposers in the end. Liveness: Ensures the procedure is completed within a limited time. Decisions will be made and learners will get the chosen decisions. This process includes the following procedures: proposer comes up with a proposal and tries to obtain supports from a majority of acceptors. When the number of supports excesses a half, then it will be sent to everyone for further confirmation. If a proposer has failure in this process, timeout mechanism could be applied to solve this issue. Only in extreme circumstances in which proposers are dysfunctional in each round of new voting, the system can never reach a consensus (the rate is quite small). Paxos can guarantee when there are over 1/2 functional nodes, the system could reach consensus.

5．PointMineMulti-layer Mining System

Point Mine is a positive incentive mechanism used to encourage developers who offer support to the ecosystem and embracing the upper users. It could ensure the fun for both developers and users in mining.

Set method is an evaluation index for PointSet to evaluate values. On the basis of Method+ahp method, we have adjusted weight considering on the features of blockchains in order to ensure the proper usage.

1. **Devimine.** A developer mining model. As the constructor of blockchain system, developers at the application layer develop their dapp by api and sdk offered by PointSet. The system will calculate contribution value according to setmethod and come up with relevant SET incentives.

2. **Usemine.** User mining model. Participants are the upper users. User mining model combines reading mining, socialization mining, information mining together. Obey Setmethod, participates could get token incentives on a fixed level.

III. PointSet Application Scenario

1. Digital Identity

In the Internet era, personal information has privacy, safety and convenience concerns. In the PointSet network, individuals could create their IDs and have full control of the safety and security of that ID. Digital ID is like a key to the blockchain world, with which users could sign up the protocols, protect copyright, participate in voting and transact assets.

2. Copyright Protection

When the emergency of Internet speeds up the information transmission, it also brings some side effects. In the Internet environment, copyright protection has always been the priority. Lacking enough protection of the copyright could create difficulties in protecting, proofing and reserving copyright.

Taking advantage of the blockchain and identification system, PointSet offers a much safer, easier and low budget copyright protection system, in which content generators could build their unique digital signature. Once the work bonds with a digital signature, the records could not be distorted and would be stored in the decentralized bottom layer. Copyright of these contents generators will be recognized by the blockchain and it is easy to proof and reserve the rights.

3. Distributed Social Network

In a decentralized social network, users could control their own data. Using the digital ID system, users could connect to the network using automatic nodes and realize real-time connection between nodes. User information is encrypted and stored P2P on the public chain and their social information is abundant on the public chain. Such information is available only to individuals with encrypted keys. PointSet distributed social network returns the information controls back to users and protects their privacy.

Token incentives could encourage users creating much more values. As a digital platform, PointSet can realize P2P connection between users without third-party interference. Users could choose to communicate with their friends normally or anonymously. They can also create communities on the platform, which is totally depended on the user themselves.

4. Distributed Content Platform

Traditional media economic model consists of user, author, platform and advertiser. Demands of any parties are unified. Users have information and build relations on the platform but they don't share the control rights and profits rights. In the entire economic system, users are in the passive state.

PointSet weakens the concept of various participants. On the premise of maximizing participants' profits, their roles are interchangeable. Besides offering api and other access port for developers, it comes up with a brand new concept with token as incentives. Users are everything. Here, users are producers as well as consumers; they are, on the other hand, advertisers also. Users who participate in the bottom development could be the party to platform, which corresponds to the idea of everyone's involvement and decentralize.

A decentralized network that generates contents and incentives ecological system could be realized using PointSet. In such a network, content generator, content consumer, content platform and advertiser are assigned with reasonable resources and gained reasonable returns. PointSet has a huge potential in copyright protection, user demands and advertisements.

5. Other Application Scenarios

Decentralized capital service; decentralized transaction; decentralized insurance; flows on asset chains; origin of products; charity events

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As a public chain in the multi-layer mining system, PointSet sets off from the public chain, focusing on digital identification, copyright protection, decentralized social network and distributed content platform at the moment. Then the service will expand to decentralized asset services, decentralized trade and other aspects. In the future, PointSet system will have the cross chain storage function and bring a marvelous change to the entire system.

IV. Token Incentives
1. PointSet Token SET

The ecological system of PointSet depends on the token incentives. SET is the token in PointSet and the total number is 21000000000 never added issues.

30% of SET is used to build mining pools. Ecological system is the basis of PointSet. Applying unique dynamic algorithm, SET Method (combined Delphi Method+ahp method) and developer ecological contribution value.

20% of SET is used to motivate the team.

20% of the foundation would be invested in commercial cooperation, ecological development and other aspects.

The rest 30% is used for token exchange and Candy release.

All the redeemed ETH are used for project construction, including talent acquisition, market expansion, community operation and etc.

2. Destroying Mechanism

Designing initiative of SET is to create an incentive deflationary token on a small scale. On the premise of never added issues, it will charge a proportion of service fees on dapp profits gained in PointSet ecosystem. A proportion of service fee will be destroyed in order to protect the deflationary features of the system.

VI. Team and Corporative Partners

1. Team Introduction

Members of PointSet are from well-reputed Internet companies such as Baidu, Alibaba, NetEase and Mafengwo. Some of them are designers and investors of the early blockchain projects. The entire team is proficient in Internet entrepreneurship and blockchain investment. With accurate global forecasting acumen in the blockchain field and rich global business management experience, the team is good at business development and strategic marketing. Leader in the team is keen on blockchain technology and has a profound understanding of data storage, digital ID, copyright protection and security of digital assets. United by a shared goal, team members endeavor on developing PointSet bottom layers, perfecting market campaigns and leading PointSet to the summit of the digital economy.

Mateo

Pointset （Singapore） PTE.LTD CEO

Founder of Gotop.vc

Bachelor of Economics, many years of private equity, investment banking experience; senior digital currency investors, good at team, project management; rich blockchain solutions and blockchain project experience.

https://www.linkedin.com/in/mateo-pointset/

Jorge

Pointset（Singapore）PTE.LTD CTO

Responsible for Pointset's overall product planning and R&D work. He has many years of experience in computer software development. He has worked in large-scale video communication technology companies in China and has extensive experience in network optimization, high concurrency and distributed system development. Focus on the underlying storage optimization of the blockchain and focus on solving the ternary paradox of the blockchain.

https://www.linkedin.com/in/set-Jorge/

Pedro

Pointset（Singapore）PTE.LTD CDO

He is good at mobile internet product design, familiar with the logic of multiple project products at the bottom of the blockchain, and has considerable research on content storage and copyright protection. Years of experience in Internet product operations, multilingualism, extensive marketing and management experience.

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Miguel

Pointset（Singapore）PTE.LTD development manager

Full-stack engineer, good at technical architecture design, many years of experience in well-known Internet companies, and a lot of achievements in the blockchain field.

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Pandrea

Pointset （Singapore） PTE.LTD Business Manager

The early participants in the blockchain investment have extensive network of contacts and rich experience in financing. They are responsible for the ecological construction and business market expansion.

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Lucas

Pointset （Singapore） PTE.LTD COO

He is good at mobile internet product design, familiar with the logic of multiple project products at the bottom of the blockchain, and has considerable research on content storage and copyright protection. Years of experience in Internet product operations, multilingualism, extensive marketing and management experience.

https://www.linkedin.com/in/set-lucas/

2. Corporative Partners

Bitpie.com is a new generation of blockchain asset integrated service platform developed by Bither.net. Based on HD wallet technology, multi-signature and chain transaction, you can use digital currency easily and safely. Easily send and receive bitcoin, and easily trade all kinds of transactions.

Topchain is the global leading brand of blockchain games. It reshapes the game industry architecture with the concept of decentralization. It solves the current game industry giant monopoly and channel defects through the top-level chain player community, topology consensus and topological mining. Decentralized industrial structure.

Coinjapan is a reliable partner to attract Japanese investment through crowdfunding. The world's largest cryptocurrency market has active investors who are willing to invest in innovative projects and future technologies that are only open to those who "speak" in understandable language. Coinjapan will pave the way for your company's Japanese investment market and provide a successful ICO for the rapid development of the project.

Platinum Zone is an internet marketing company that contributes to your business income by its most powerful email marketing solution. The world is becoming borderless and expanding its business in the future, you must focus on the world's level of development to support the expanding border guards and establish location and global companies.

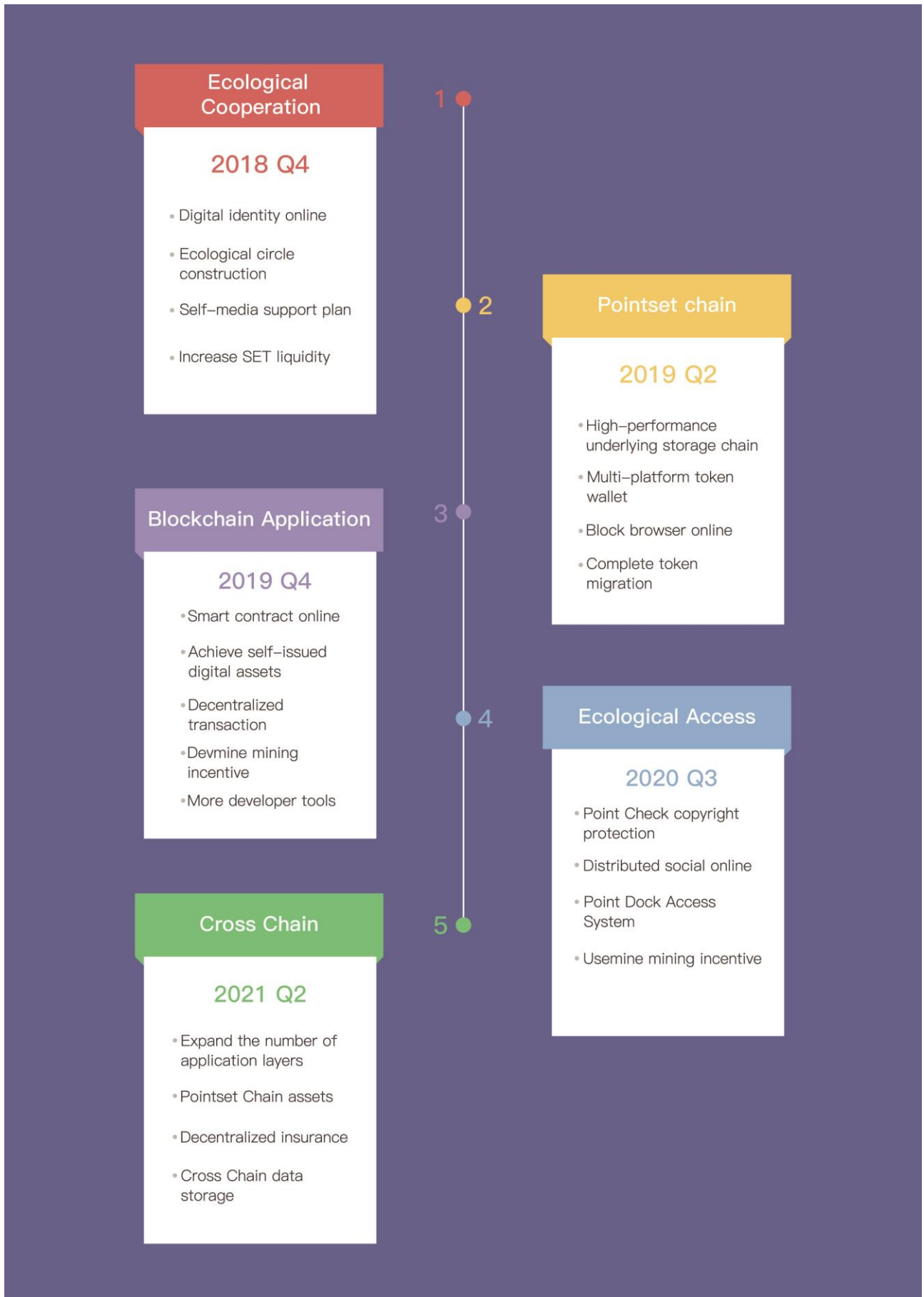Gotop.vc, a professional blockchain investment institution.

Bcj.top is a blockchain service platform that integrates information, market data, navigation, project library, strategy and currency selection. Timely information, accurate data and practical tools make blockchain investment easier.

One-click access to the blockchain world, red packets, information and ,chat.

VII. Our Roadmap

Ecological Cooperation

2018 Q4

- Digital identity online
- Ecological circle construction
- Self–media support plan
- Increase SET liquidity

1

2

Pointset chain

2019 Q2

- High–performance underlying storage chain
- Multi–platform token wallet
- Block browser online
- Complete token migration

3

Blockchain Application

2019 Q4

- Smart contract online
- Achieve self–issued digital assets
- Decentralized transaction
- Devmine mining incentive
- More developer tools

4

Ecological Access

2020 Q3

- Point Check copyright protection
- Distributed social online
- Point Dock Access System
- Usemine mining incentive

5

Cross Chain

2021 Q2

- Expand the number of application layers
- Pointset Chain assets
- Decentralized insurance
- Cross Chain data storage

VIII. Risk Warning and Disclaimer

1. Notice

This documentation only serves the purpose of information transmission. None of the information has the investment implications in form of securities nor instigation for investment. This documentation neither consists of nor should be comprehended as an act offering purchasing behaviors of any kind and it serves no contract or commitment purpose.

This documentation has no interference with any regulated products within the judicial controls. This documentation is only a "White Paper", a conceptual documentation debriefing projects. It doesn't sell or calls for tenders that related to PointSet products, company shares, securities or any other regulated products.

All the participants should take risks. As legitimate investors, participants should have risk evaluations and involve in PointSet considering their own risk-taking abilities. PointSet team clears that relevant users should be familiar with the potential risks. Once participating in the investment, it would be seen as they understand the project risks and willing to bear any results and following consequences.

2. Risk Warning

Blockchain industry is still at its early stage. Monitoring attitudes of different governments on blockchain and encrypted digital currency are still unclear while huge potential uncertainties exist. Because of policy uncertainties, market demands, technology and other uncontrollable factors, there might be the possibility of project failure which would cause loss of your BitCoins or other types of currency.

For participants who are qualified for crowdfunding, please carefully read PointSet project introduction, figure out potential risks with your partners, fully evaluate your risk taking ability and your situation before making any judgments.

The future of PointSet is built on blockchain technology and encrypted algorithm. Up till now, blockchain technology is still at its primary stage while cryptography is rapidly developing. PointSet team could not guarantee the successful application of all technologies and in the meanwhile there is a possibility of loss caused by the hacker attack and vulnerable codes.

Since the investment in encrypted currency is still a brand new field, besides the above-mentioned risks, there could be other risks that have not been mentioned or anticipated.